

HIGH-GRADE INNOVATIONS AS A METHOD OF STRENGTHENING THE COMPANY INDUSTRIAL CAPACITY

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Today the home market makes new demands on quality and safety of construction objects. But needless to say that business is interested in QMS (quality management system) and techniques of safety precautions. At the same time, according to the last report of ISO certification, the growth of certificate registered number (2%) proves the market relevance of ISO management system in Russia.

The constant requirement strengthening to the product output happens on behalf of the state and consumers. As a result, the Research and Development centers under the jurisdiction of large construction companies are becoming more essential [6]. These centers advance the strengthening of a company industrial capacity, provide a set of unique innovative solutions that leads to the increase of the workforce productivity, the decline of factory expenses, resource-efficient production and ensuring of the product output quality level to the level of leading house building corporations. The result of research and development centers is innovations, and company owner's expectations for establishing such centers are primarily connected with receiving a unique result for achieving the competitive ability in the market. [1] To achieve the result, it is necessary to apply a unique process that is a “project” according to ISO 9000 definition.

Under the conditions of hard competition, it is indispensable to carry out projects within a short time and for competitive prices, but to output a high-quality product. The process of forming an innovation is “creative”, relative free surrounding is necessary for innovations where they can be developed without the external noise so there is a question “When does quality become a «filter» for a new idea?”.

It is possible to retrace the connection between the innovation management and the quality management and to define a border of their interaction after the analysis of the strategic process pattern proposed by Henry Mintzberg, the American famous specialist in the field of strategic management.

The innovation management is connected with new spontaneously-emerged circumstances presenting unexpected threats and favorable opportunities in relation to a plan. In this case, emergent inceptions dominate, the levels of uncertainty changes are very high.

As soon as this task is completed and main uncertainties in connections with running project are resolved, the quality of planned project and planned start must be provided. By that, the excellent value for

a consumer is achieved. The scheme of innovating and quality interaction from the idea to result stages is illustrated by Figure 1. [4]

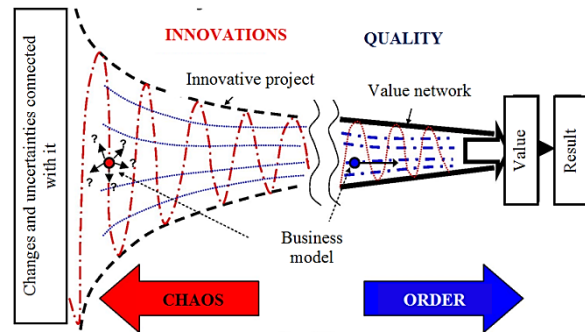


Figure 1. The scheme of innovation and quality interaction from idea to result stages

The process of forming an innovation was analyzed through the example of the leader of Siberian building complex JSC “THBC” (“Tomsk House Building Company”) on the base of the subsidiary company LLC “Stroytekhinnovations THBC” is working at competitive growth of THBC holding company by means of the development and the implementation of innovative resource-saving technologies for building and material production for building at a fast pace which satisfies community need.

Innovative entity must be innovative in approaches of its activity. Today LLC “Stroytekhinnovations THBC” integrates the quality management system in consideration of specification of ISO 9001 – 2008 and National State Standard ISO/IEC 17025 – 2009.

So, the aim of the article is to observe operational process of quality management in the construction sphere, regarding the example of the LLC “Stroytekhinnovations THBC”.

The model of life cycle processes for establishing innovation, which is currently exclusive, was developed for the purposes of this research (Fig. 2).

The innovative product quality is difficult to evaluate because of their technical rules and regulations for absolutely new “development”. At this stage, some group of criteria for innovative quality product, which will be corrected according to the result of information analysis, was developed:

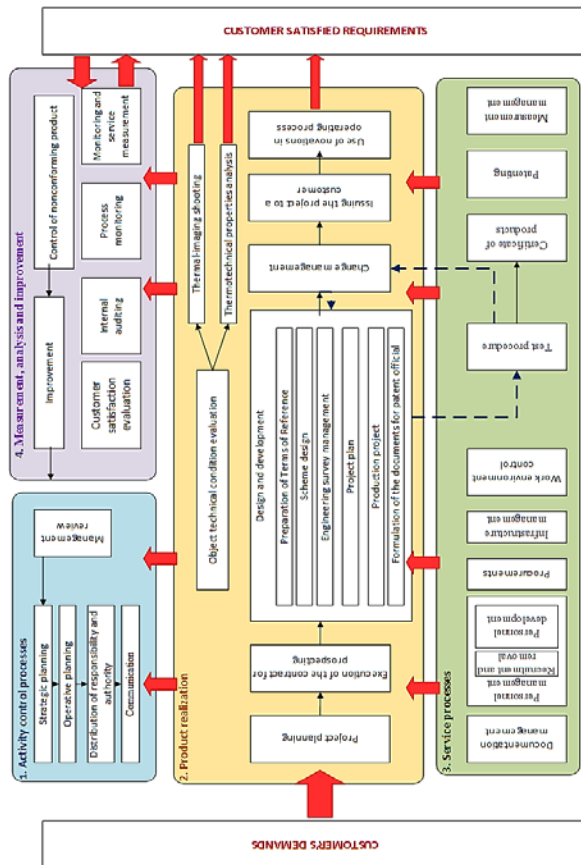


Figure 2. The process model of LLC "Stroytekhinnovations THBC"

- absence of criticism on behalf of all consumers used the information about innovations (design engineers, business-friend, building companies etc.);
- test results
 - a) correspondence of calculation method results – if developed calculation methods for testing are available;
 - b) quantity of repeat tests for innovative product because of calculation mistake – if standard calculations are not available;
- absence of external expertise remarks;
- economic efficiency (expenses involved in Research and Development and sale results of new products or services as a percentage of total sale results);
- growth of income as a result of new product or service implementation;
- time passed from the moment of activation (admission) of new proposal to the launch of innovative product;
- share of proceeds from disposal of new product in total amount of profit from year to year;
- relative growth of the company market value in comparison with the relative growth of industrial market for the last N years;

- total amount of developed innovative products for the period to amount of distributed ones.

The above-mentioned qualitative indicators allows to evaluate and analyze the quality of developed innovations in order to receive the perceptible effect in decrease of materials consumption and increase of quality for residential and public buildings in our region. JSC "THBC" is working for innovative leadership in the area of building. According to the general director of JSC "THBC" A. K. Shpeter, "as a result, THBC hopes to increase its competitive power by means of getting own manufacturing technologies to the modern international level". [5]

The state-run programmes for the support of innovative projects are appealing to many investors and specialists to the development of new decisions in current important branches of knowledge and production. But the interest is not sometimes justified because developments turn out low-rank, are not certificated by the state expertise. [2] The most unpleasant is that the state can accidentally reduce the enthusiasm of investors somehow, as a matter of fact, total scientific and technical progress of the state depends on it.

It is possible to take into consideration to Bertrand Jocelyn de Norey's words: "keep the roots in the circles" or "go forward". [3] If you prefer to go forward, it will be necessary to become a leader of changes and innovations helping organizations in the innovative development on the base of quality in the direction to the successful and ongoing future.

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